



## Job Aid: Replacing the G700 Media Gateway

You or your service support center may determine that you must replace a G700 Media Gateway. This determination may be based on a variety and/or combination of symptoms, including, but not limited to, the following:

1. You cannot log in to the media gateway
2. The gateway does not register with its primary controller
3. The gateway is experiencing rolling reboots
4. The VoIP module on the media gateway's motherboard is not working.

This job aid describes the procedures to replace an installed G700 Media Gateway with a new G700. The steps in the procedures vary, depending on the following two considerations:

- The G700 Media Gateway may or may not contain an S8300 Media Server, which can be configured as a primary controller or as a local survivable processor (LSP).
- The G700 Media Gateway may be functional or not functional.

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## Assumptions

The following items are assumed for the successful completion of this replacement procedure. If any of these assumptions do not apply to your scenario, some steps in the on-site replacement procedure may need to be modified:

- If the installed G700 contains an S8300, it may be configured as a primary controller or as an LSP
- An installed S8300, if any, and any installed media modules, will be reused in the new G700.
- The customer will provide a computer on the LAN for:
  - Connection to the G700's primary controller if the primary controller is remote
  - TFTP server support for backup of G700 config and dat files (only if the G700 Media Gateway is functional) and for installation of new firmware

### Note:

An S8300 Media Server may be used as a TFTP server for staging gateway firmware for installation. See [Appendix 2: Using the TFTP server on the S8300 Media Server to install firmware](#) on page 16.

- FTP backup of G700 VAL announcements, if any (only if the G700 Media Gateway is still functional)

**Note:**

The media gateway must be able to communicate with the FTP and TFTP servers.

- The media gateway processor and stack configurations are still valid. This means that IP addresses (on the customer's LAN) are still available for the following:
  - P330 stack processor
  - Media gateway processor (MGP)
  - VoIP engine on the G700 motherboard (voip-v0)
  - Primary controller (S8300, S8500, S8700, or S8710 Media Server)
  - LSPs
  - FTP and TFTP server
- The Avaya Gateway Installation Wizard may be used for the initial configuration of the new G700 as well as the upgrade of firmware — the Gateway Installation Wizard application must be installed on the technician's laptop.
- The technician is familiar with how to connect to and access the G700 Media Gateway and S8300 Media Server, including:
  - setting up a direct connection from the laptop to the G700 Console (serial) port and using Hyperterm or similar serial-communications application
  - logging in to the P330 stack processor
  - setting up a direct connection from the laptop to the S8300 Services port
  - using the Web Interface

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## Before you go to the site

It is strongly recommended that you obtain as much information as possible that will be used in the replacement procedure before going to the customer site.

Perform the following steps before going to the customer site:

1. Obtain the IP addresses of the primary controller (may be an S8300, S8500, S8700, or S8710 Media Server) and the LSPs in the network.
2. Obtain the IP addresses and subnet masks for the P330 stack processor and MGP on the G700 to be replaced, and the default gateway on the customer's LAN (note: do not confuse the default gateway with the MGP IP address).

3. Obtain the IP address of a computer on the customer's LAN that must be set up as a TFTP server. Software needed to set up a TFTP server can be downloaded from the Avaya Support Website ([www.avaya.com/support](http://www.avaya.com/support)). If needed, instructions to set up a TFTP server are given in [Appendix 1: Set up a TFTP Server](#).

The TFTP server will also be used for TFTP backups (only if the G700 Media Gateway is functional)

4. Check to see what media modules are installed in the G700 Media Gateway. You can do this by looking at the media gateway itself or by logging in to the SAT of the primary controller and running the `display media-gateway <number>` command.
5. Download to your laptop the most recent versions of firmware for each device in the G700 Media Gateway, including the P330 stack processor and the MGP and the media modules you determined in the previous step. These files are available in the Software/Firmware Downloads section of the Avaya Support Website.

On a G700 Media Gateway and its media modules, the most recent firmware will work with the current, or even an older, version of Communication Manager. For more information, see *Communication Manager 2.0 Software & Firmware Compatibility Matrix*, also available on the the Software/Firmware Downloads section of the Avaya Support Website.

 **CAUTION:**

Media gateway or media module firmware must be current with or more recent than the version of Communication Manager software on the primary controller.

6. Arrange for access to the primary controller.
  - If the primary controller is an S8300, either in the G700 to be replaced or in another G700 in the same stack or a connected stack, you will use a direct connection from your laptop's NIC card to the Services port on the S8300. Your laptop must be properly configured for the direct connection. For example, your laptop must be configured with static IP address of 192.11.13.5. For this connection, the S8300 can be accessed via telnet or web browser using the IP address 192.11.13.6.

**Note:**

See *Installation and Upgrades for the Avaya G700 Media Gateway and Avaya S8300 Media Server*, 555-234-100, for detailed information about setting up connections to the G700 and S8300 and the associated laptop configurations.

- However, if the primary controller is at a remote location, you will need to be able to access the primary controller over the customer's LAN. The customer should provide a computer connected to the LAN for this purpose. Alternatively, if the customer does not provide a computer for this purpose, you could be in contact with someone who has access to the primary controller and have them do the controller steps at the appropriate times.

In addition, if the G700 contains an S8300 (primary controller or LSP):

7. Create and download a new license file from the RFA Website. The new license file must be associated with the serial number of the new G700. Save the license file on the laptop hard drive that you will use at the customer site. Do NOT download a new password file. Be sure to obtain the file with the .lic extension.

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## At the customer site

In the following procedures, you will use your laptop to access both the G700 (via a direct serial connection) and the primary controller (either via a direct connection or over the LAN). You will need to alternate between these two connections several times.

Perform the following procedures at the customer site:

1. Set up connections to the G700, primary controller, and LSP:
  - a. **(Only if the G700 Media Gateway is functional)** Direct connection to the G700 — using a serial cable, connect a serial cable from your *laptop* to the Console port on the G700.
  - b. Connection to the primary controller —
    - If the primary controller is local, connect a crossover cable from your *laptop* to the Services port on the server.
    - If the primary controller is at a remote location, set up a LAN connection to the primary controller on a *customer computer*.
  - c. Connection to the LSP — if the G700 contains an S8300 configured as an LSP — after the LSP is reinserted into the new G700, connect a crossover cable from your laptop to the Services port on the S8300. This connection is needed only in Step [22](#) to install the new license file.

**Note:**

If the primary controller is an S8500, S8700, or S8710, or an S8300 on a different G700 that is not being replaced, you do not need to save translations at this point.

2. If the primary controller is an S8300 in the G700 to be replaced, use the SAT interface to save translations. Verify that translations were saved successfully.

**Note:**

If the G700 Media Gateway is not functioning, skip to Step [5](#).

3. **(Only if the G700 Media Gateway is functional)** Back up the G700 configuration files to a TFTP server. (The TFTP server must be on the customer LAN and the G700 must be connected to the LAN through one of the Ethernet ports, EXT1 or EXT2):
  - a. Using the serial connection, open a Hyperterm session and log in to the P330 stack processor.
  - b. At the P330 prompt, type

```
copy stack-config tftp <stack-filename> <ip-address>
and
copy module-config tftp <module-filename> <ip-address> <module #>
```

where,  
*<stack-filename>* is a name you choose for the backed up stack-config file; for example, the G700 stack module number followed by "stack": **1stack**.

`<module-filename>` is a name you choose for the module-config file; for example, the G700 stack module number followed by "module": **1module**.

(Write down these file names for later use).

`<ip-address>` is the ip address of the destination TFTP server

`<module #>` is the stack module number of the G700 (1–10).

- c. Session to the MGP: type

```
session mgp
```

- d. Type **configure** to change to the configure mode.

- e. At the MGP(configure) prompt, type

```
copy mgp-config tftp tffs.dat <ip-address>
```

where,

`<ip-address>` is the ip address of the destination TFTP server

**Note:**

If the G700 Media Gateway is not functioning, skip to Step [5](#). Also, if there are no VAL announcements on the G700, skip to Step [5](#). Backing up the VAL announcements can most easily be done using VAL Manager, if available, instead of Step [4](#).

4. **(Only if the G700 Media Gateway is functional)** Backup G700 VAL announcements (if gateway announcements are present on the G700).

**Note:**

To determine if VAL announcements are present, log in to the SAT command line interface on the primary controller, and type the command **list directory board <xx>v9**, where `<xx>` is the number of the media gateway.

- a. Enable file system for the G700:

- Telnet to the primary server and start a SAT session.

On your laptop, click **Start > Run** and enter **telnet <server-ip-address>**

Log in as **craft**

Type **SAT**

Log in as **craft**

- At the SAT prompt, type

```
enable filesystem board <nn>v9 login <ftp-username>
```

```
<ftp-password>
```

where,

`<nn>` is the media gateway number administered for the G700

`<ftp-username>` is a 3–6 character user ID for the FTP session

`<ftp-password>` is a 7–11 character password for the FTP session

- b. Log in to a computer connected to the customer LAN. This computer will be used as an "FTP client" to temporarily store the G700 VAL announcements.

- c. Copy the existing announcement files from the G700 to the FTP client.
  - At the command prompt on the FTP client, type  
`ftp <ip-address>`  
where `<ip-address>` is the IP address of the media gateway processor (MGP) on the G700.
  - At the user prompt, type the ftp-username you set up in Step [a](#).
  - At the password prompt, type the ftp-password you set up in Step [a](#).
  - At the `ftp>` prompt, type `bin` to change to binary mode.
  - At the `ftp>` prompt, type `dir` to view the contents of the `/ann` directory.
  - At the `ftp>` prompt, type  
`get <filename>.wav`  
where `<filename>` is the file name of an announcement file that you want to back up.  
(The `get` command copies the announcement file to the directory from which you initiated the FTP session on the FTP client.)
  - Repeat the `get` command for each announcement file you want to back up.
- d. Type `bye` to close the ftp session.
5. Ensure that all cables (connected to the G700 and media modules) are adequately marked for later reinstallation in the same locations.
6. Shutdown the S8300, if any:

Click **Shutdown Server** under Server on the Maintenance Web Interface. Or, press and hold down the Shutdown button (on the faceplate of the S8300) until the OK to Remove LED starts blinking. In either case, when the OK to Remove LED is on steady, you can safely power down the system.
7. Power down the G700 (unplug power cord).
8. Remove all cables. Remove the old G700 from the rack. Mount the new G700 in the rack.
9. Transfer the media modules and the S8300, if any, from the old G700 to the new G700, maintaining the original slot locations.
10. Reconnect cables in the same locations as on the old G700.
11. Power up the G700 (plug in power cord).
12. Provision the new G700 (MGP, P330, IP Routes):
  - a. Connect a serial cable from your laptop's serial port to the Console port on the G700
  - b. Using a serial-communications application such as Hyperterm, access the P330 stack processor and log in.

**Note:**

The following steps, **c–m**, can alternatively be completed using the Gateway Installation Wizard. To use the wizard, the GIW application must be installed on your laptop.

- c. If necessary, start the Hyperterm session and log in.
- d. Provision the IP address of the P330 stack processor: at the P330 prompt, type  
**set interface inband <vlan> <ip-address> <netmask>**  
where,  
**<vlan>** is the vlan number  
**<ip-address>** is the IP address of the P330 stack processor  
**<netmask>** is the subnet mask
- e. Reset the P330 stack processor: type  
**reset <module-number>**  
where **<module-number>** is the module number of the G700 in the stack.  
If necessary, re-start the Hyperterm session and log in.
- f. Set up an IP route through the default gateway. At the P330 prompt, type  
**set ip route 0.0.0.0 <default-gateway-ip-address>**  
where,  
**<default-gateway-ip-address>** is the IP address of the router or switch that handles packets addressed to destinations outside of the subnet.
- g. Session to the MGP and change to the configure mode: type  
**session mgp**  
**configure**
- h. Re-initialize the MGP. At the MGP(configure) prompt, type  
**nvrn initialize**  
If necessary, re-start the Hyperterm session and log in.
- i. Session to the MGP and change to the configure mode: type  
**session mgp**  
**configure**
- j. Provision the IP address of the media gateway processor: at the MGP(configure) prompt, type  
**set interface mgp 1 <ip-address> <netmask>**  
where,  
**<ip-address>** is the IP address of the media gateway processor (MGP)  
**<netmask>** is the subnet mask.
- k. Reset the MGP: type  
**reset mgp**  
After the reset, the P330 login prompt will appear. Log in.
- l. Session to the MGP and change to the configure mode: type  
**session mgp**  
**configure**

m. Set up an IP route through the default gateway: type

```
set ip route 0.0.0.0 0.0.0.0 <default-gateway-ip-address>
```

where,

*<default-gateway-ip-address>* is the IP address of the router or switch that handles packets addressed to destinations outside of the subnet.

Note that the "0.0.0.0 0.0.0.0" is two all-zero IP addresses separated by a space.

**Note:**

If the original G700 Media Gateway was not functioning, skip to Step [14](#). If the original G700 Media Gateway was functioning, complete Step [13](#), then skip to Step [17](#).

13. **(Only if the original G700 Media Gateway was functional)** Restore the configuration backup files:

a. Type `exit` twice to return to the P330 stack processor. At the P330 prompt, type `copy tftp stack-config <stack-filename> <ip-address>` and

```
copy tftp module-config <module-filename> <ip-address>
```

where,

*<stack-filename>* is a name you chose in Step [3](#) for the backed up stack-config file; for example, **1stack**.

*<module-filename>* is a name you chose in Step [3](#) for the module-config file; for example, **1module**.

*<ip-address>* is the IP address of the TFTP server

b. Session to the MGP and change to the configure mode: type `session mgp` `configure`

c. At the MGP(configure) prompt, type `copy tftp mgp-config tffs.dat <ip-address>`

where,

*<ip-address>* is the ip address of the TFTP server

d. Reset the MGP: type `reset mgp`

**Note:**

Skip to Step [17](#).

14. (Only if the original G700 Media Gateway was NOT functional) Assign IP addresses to VoIP resources

- a. At the **MG-???-n(configure)#** prompt, type `set interface voip <number> <ip address>`

<number> is the slot number of the VoIP media module. **v0** designates the VoIP resource resident on the G700 Media Gateway motherboard. The MM760 VoIP Media Modules are designated according the slot (for example, **v1, v2, v3, v4**) in which the media module has been installed. <ip address> is the IP address of the VoIP resource.

For example: `set interface voip v0 132.236.73.3`

15. (Only if the original G700 Media Gateway was NOT functional) Assign the controller list for the G700 Media Gateway

- a. At the **MG-???-n(configure)#** prompt, type the following commands to designate the primary, secondary, and LSP controllers for this G700:

```
clear mgc list
```

```
set mgc list <ip_address> [,<ip_address> [,<ip_address>
[,<ip_address>]]]
```

where, the first <ip\_address> is the IP address of the primary controller for this G700. If the primary controller is an S8500, S8700, or S8710, this is the IP address of a C-LAN board that is connected to the media server. If the primary controller is an S8300, this is the IP address of the S8300.

The next three <ip\_address> parameters are optional IP addresses of up to three alternate controllers. Each of the three optional controllers can be an S8500, S8700, S8710, or an S8300 configured as an LSP, depending on the G700's primary controller.

 **CAUTION:**

If you need to change the mgc list, you must run `clear mgc list` before running `set mgc list` again.

The following table describes the possible optional controllers for an S8300, S8500, S8700, and S8710 primary controller:

Primary Server	Controller IP Addresses
S8300	<b>First:</b> IP address of the S8300 primary controller. <b>Next three:</b> one, two, or three IP addresses of S8300s configured as LSPs.
S8500, S8700, or S8710	<b>First:</b> IP address of the C-LAN for the S8500, S8700, or S8710 primary controller. <b>Next three:</b> one, two, or three IP addresses of alternate C-LANs and/or LSPs.

16. (Only if the original G700 Media Gateway was NOT functional) Set the LSP transition points.

You must set the time that the G700 searches, in the event of a network problem, for primary controllers (for example, additional CLAN connections) with which to register. After this search time has elapsed, the G700 will search for an LSP with which to register. You must also set the total time the G700 searches for either a primary controller and an LSP, after which the G700 resets. And finally, you must define how many primary controllers, from 1 to 4, are in the controller list you just defined.

- a. At the MG-001-1(configure)# prompt, type `set mgp reset-times primary-search <search-time>`

where *<search-time>* is the time in minutes that the G700 searches for a primary controller before looking for an LSP. The range is from **1** to **60**.

- b. At the MG-001-1(configure)# prompt, type `set mgp reset-times total-search <search-time>`

where *<search-time>* is the time in minutes that the G700 searches for both primary controllers or LSPs. The range is from **1** to **60**.

- c. At the MG-001-1(configure)# prompt, type `set mgp reset-times transition-point <#_of_primary>`

where *<#\_of\_primary>* is the number of primary controllers in the controller list. If the primary controller is an S8500 or S8700, the range is from **1** to **4**. If the primary controller is an S8300, *<#\_of\_primary>* must be **1**.

17. Reconnect to the primary server.

18. Restore the announcement files.

**Note:**

If you did not back up VAL announcements in Step 4, skip this step. This step can be done using VAL Manager, if available. If the G700 was not originally functional, VAL announcements must be rerecorded, if recorded directly to the G700 or reinstalled if announcement files were recorded externally. Check with the customer to see if external announcement files are available.

- a. Repeat Step [a](#) in Step [4](#) to enable an FTP session on the S8300.

- b. Copy the backed-up announcement files from the FTP client to the G700.

- At the FTP client command prompt, type `ftp <ip-address>`  
where *<ip-address>* is the ip address of the MGP
- At the user prompt, type the ftp-username you set up in Step [a](#).
- At the password prompt, type the ftp-password you set up in Step [a](#).
- At the `ftp>` prompt, type `bin` to change to binary mode.
- At the `ftp>` prompt, type `dir` to view the contents of the /ann directory.

- At the `ftp>` prompt, type  
`put <filename>.wav`  
 where `<filename>` is the name of an announcement file you want to restore.  
 (The `put` command copies the announcement file from the FTP client to the `/ann` directory on the G700.)
- Repeat the `put` command to restore each announcement file that you backed up in Step 4.

c. Type `bye` to close the ftp session.

19. Reconnect to the G700 Media Gateway.

20. Determine which firmware to install on the G700

Conduct the following procedure to compare software versions running on the G700 processors and media modules with the versions in you downloaded from the Avaya support Web site. If the versions do not match, new firmware for those components is necessary.

**Note:**

The Avaya Gateway Installation Wizard may be used for this task as well as the upgrade of firmware — the Gateway Installation Wizard application must be installed on the technician’s laptop.

- a. At either the `P330-1(super)#` or `P330-1(configure)#` prompt, type `dir`.

The system displays the list of software.

---

**Directory List for P300 Processor**

M#	file description	ver num	file type	file location	file
1	module-config Configuration	N/A	Running Conf	Ram	Module
1	stack-config Configuration	N/A	Running Conf	Ram	Stack

- b. Check the version number (ver num) of the `EW_Archive` file to see if it matches the Release Letter. If not, you must upgrade the P330 stack processor.

c. Type `show image version`

The system displays the list of software.

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## Show Image Version List for P330 Processor

Mod	Module-Type	Bank	Version
3	Avaya G700 Media Gateway	A	0.0.0
3	Avaya G700 Media Gateway	B	3.9.0

- 
- d. Check the version number of the stack software image file in Band B to see if it matches the your planning document. If not, you must upgrade the P330 stack processor.
  - e. Type `session mgp`
  - f. At the MG-001-1(super)# prompt, type `show mg list_config`  
The system displays the list of software.

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## Show MG List\_Config

```
ryp
SLOT  TYPE   CODE   SUFFIX HW VINTAGE  FW VINTAGE  VOIP
FW
-----
V0    G700   DAF1   A      00          210(B)      2
V1    ICC    S8300  A      72          00          N/A
V2    DCP    MM712  A      2           52          N/A
V3    ANA    MM711  A      2           12          N/A
V4    DS1    MM710  A      1           54          N/A
```

- 
- g. Refer to the list to check the FW vintage number of the G700. In the TYPE column, find G700, then check the matching field in the FW VINTAGE column to see if it matches the vintage number in your planning forms. If not, you must install new firmware on the G700 Media Gateway. Also check if the release number in the FW VINTAGE column contains (A) or (B) to designate the software bank. If the list shows B, you will upgrade A. If the list shows A, you will upgrade B.

- h. Refer to the VOIP FW column and row for slot V0 (same row occupied by the G700 information) to see if the number matches the VoIP firmware identified in your planning forms. If not, you must also upgrade the G700 Media Gateway motherboard VoIP module.

**Note:**

The VoIP processor on the motherboard is upgraded using the same firmware image file as the VoIP media modules; for example, the file mm760v8.fdl is vintage #8.

- i. Check the FW VINTAGE column for vintages of each of the installed Media Modules: MM710, MM711, MM712, MM720, and/or MM760 to see if they match the FW vintages in the planning forms. If not, you must upgrade them, as well. Reconnect to the primary server.

21. Install new firmware as appropriate.

Download files to the S8300 Media Server using the Maintenance Web Interface. Follow the procedure described in "Copying files to the S8300" in Chapter 5 of *Installation and Upgrades for Avaya G700 Media Gateway and Avaya S8300 Media Server*, 555-234-100, Issue 7, January 2005.

Alternatively, if you can use an S8300 Media Server to stage the firmware, see [Appendix 2: Using the TFTP server on the S8300 Media Server to install firmware](#) on page 16.

If you cannot use an S8300 Media Server's TFTP server to stage the firmware, the customer must configure a TFTP server on a PC connected to the customer's LAN (see [Appendix 1: Set up a TFTP Server](#) on page 14).

See also *Job Aid: Firmware Download Procedures for G700 Media Gateway*, Issue 3, 555-245-758.

**Note:**

Skip Step [22](#) if there is no S8300 in the new G700. You need to install a new license file *only* on an S8300 in the new G700. You do not need to install a new license file on any server that is not in the new G700.

22. If there is an S8300 (primary controller or LSP) in the new G700, use the Maintenance Web Interface to install the new RFA license on the S8300.
  - a. If the S8300 in the new G700 is an LSP, connect the crossover cable from your laptop to the Services port on the LSP. (If the S8300 in the new G700 is the primary controller, the crossover cable should already be connected to it).
  - b. Open the Maintenance Web Interface. Under "Miscellaneous," select **Download Files** and enter, or browse to, the full-path filename of the license file on you laptop. Click on **Download**.
  - c. Under "Security," select **License File**. Check the "Install the license file specified below" radio button and enter a file pathname, a URL, or click **Browse** to determine where the file is.

- d. Click on **Submit**.
  - e. Under "Security," select **License File** again to ensure the status is normal.
23. Provision the new G700.
- a. On the primary controller, open a SAT session
  - b. At the SAT prompt, type  
`change media-gateway <mg-number>`  
where `<mg-number>` is the number assigned to this G700
  - c. Type the serial number of the new G700 in the Identifier field and submit the screen.
  - d. Verify that the new G700 registers with Communication Manager:
    - Open a SAT session and type  
`list media-gateway`  
The **Registered?** column (last column on the right) should have **y** for the new G700.
24. Save translations on the primary controller.
25. Test as appropriate — for example, make station calls from/to the replaced G700, check for and resolve any new alarms.

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## Appendix 1: Set up a TFTP Server

The following instructions describe how to configure a Windows-based computer as a TFTP server. A TFTP server is needed for the `copy tftp` commands, which backup the configuration files and install firmware on the G700. The TFTP server can be on any computer that can be networked to the G700.

Follow these steps to configure a computer as a TFTP server.

1. On the hard drive of the computer, create a directory into which you will copy the G700 configuration files or load the G700 firmware image files; for example, C:\tftpboot.
2. Access the Avaya support website at <http://www.avaya.com/support>. on the Internet to copy the following file to the PC/laptop: `iptel_avaya_tftp.exe`.
3. At the Avaya support site, select the following sequence of links:
  - Software & Firmware Downloads**
  - Scroll down to "Telephones and End-User Devices" in the right panel and select **4600 Series IP Telephones** then **Software Downloads**
4. Select **AVAYA 4630 IP Telephone Rx.xx and TFTP Server**.
5. Scroll to bottom of page to find `iptel_avaya_tftp.exe`.

6. Click on the program and download it to any convenient temporary directory. You may also wish to download the file `iptel.pdf`, which provides instructions on installing `iptel_avaya_tftp.exe` on Windows systems.
7. Go to the directory containing the `iptel_avaya_tftp.exe` file, double-click on the filename and follow the installation wizard instructions to install it. The default installation directory is `C:\Program Files\Walusoft\TFTPSuite` — you can accept this default or specify a different one.
8. Go to the directory where the TFTP software was installed and double-click on **`tftpserver32.exe`**.

**Note:**

When you install this application, it creates a link in the start menu that makes steps 7 and 8 much easier.

9. The system displays the TFTP Server window. The IP address of the computer, plus port 69, is indicated in the upper border of the window.
10. Enable the TFTP server as follows:
  - a. Click on **System** from the menu bar and select **Setup**. The system displays the server option window.
  - b. Select the **Inbound** tab and enter the full path to the tftp directory that you created in Step [1](#) (e.g., `C:\tftpboot`) in the "Inbound file path" window. Check "Allow Inbound Paths" and "Create paths as needed".
  - c. Select the **Outbound** tab and enter the full path to the tftp directory that you created in Step [1](#) (e.g., `C:\tftpboot`) in the "Outbound file path" window. Check "Enable Paths".
  - d. Select the **Options** tab and enter **69** in the "Use Port" window (default). Since you will be using the TFTP server to backup the configuration files, be sure that the "No Outbound" and "No Incoming" boxes are **not** checked. Otherwise, leave the defaults for the check boxes.
  - e. Click **OK** to save and exit setup.

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## Appendix 2: Using the TFTP server on the S8300 Media Server to install firmware

Instead of using a separately configured TFTP server on the customer's LAN, you can use the TFTP server capability of an S8300 Media Server to stage the firmware for installation by the G700/G350 Media Gateway. To do this, you must copy the individual firmware files to the `/var/home/ftp/pub` directory on the S8300 Media Server using the Download files Web page on the S8300 Media Server. Then you must copy the files to the `/tftpboot` directory of the S8300 Media Server (see [Copying firmware files to the /tftpboot directory of the S8300 Media Server](#)).

After the files are in the `/tftpboot` directory, you can install the files on the G700/G350 Media Gateway or its media modules by specifying, in the Gateway Installation Wizard or on the Upgrade Tool, the S8300 Media Server's IP address as the TFTP server holding the firmware files you want to install.

### Copying firmware files to the /tftpboot directory of the S8300 Media Server

To copy firmware files to the `/tftpboot` directory of an S8300 Media Server, do the following:

1. Use telnet, Avaya Site Administration, or another tool to access the S8300 Media Server command line.
2. Log in as `craft`.
3. At the Linux prompt, type `cd /var/home/ftp/pub`, and press **Enter**.

The Linux prompt reappears. The current directory has changed to `/var/home/ftp/pub`.

4. At the Linux prompt, type `cp <firmware_filename> /tftpboot`, and press **Enter** to copy a single firmware file to the `/tftpboot` directory. To copy multiple firmware files (most firmware files have an `.fdl` suffix), use the command `cp *.fdl /tftpboot`.

The Linux prompt reappears. The firmware file or files have been copied to the `/tftpboot` directory..

5. Repeat step 4, if necessary, for other firmware files you want to install.
6. At the Linux prompt, type `cd /tftpboot`.

The Linux prompt reappears. The current directory has changed to `/tftpboot`.

7. At the Linux prompt, type `ls`, and press **Enter**.

A list of files in the directory appears.

8. Check the directory to make sure the firmware files you want to install are listed.